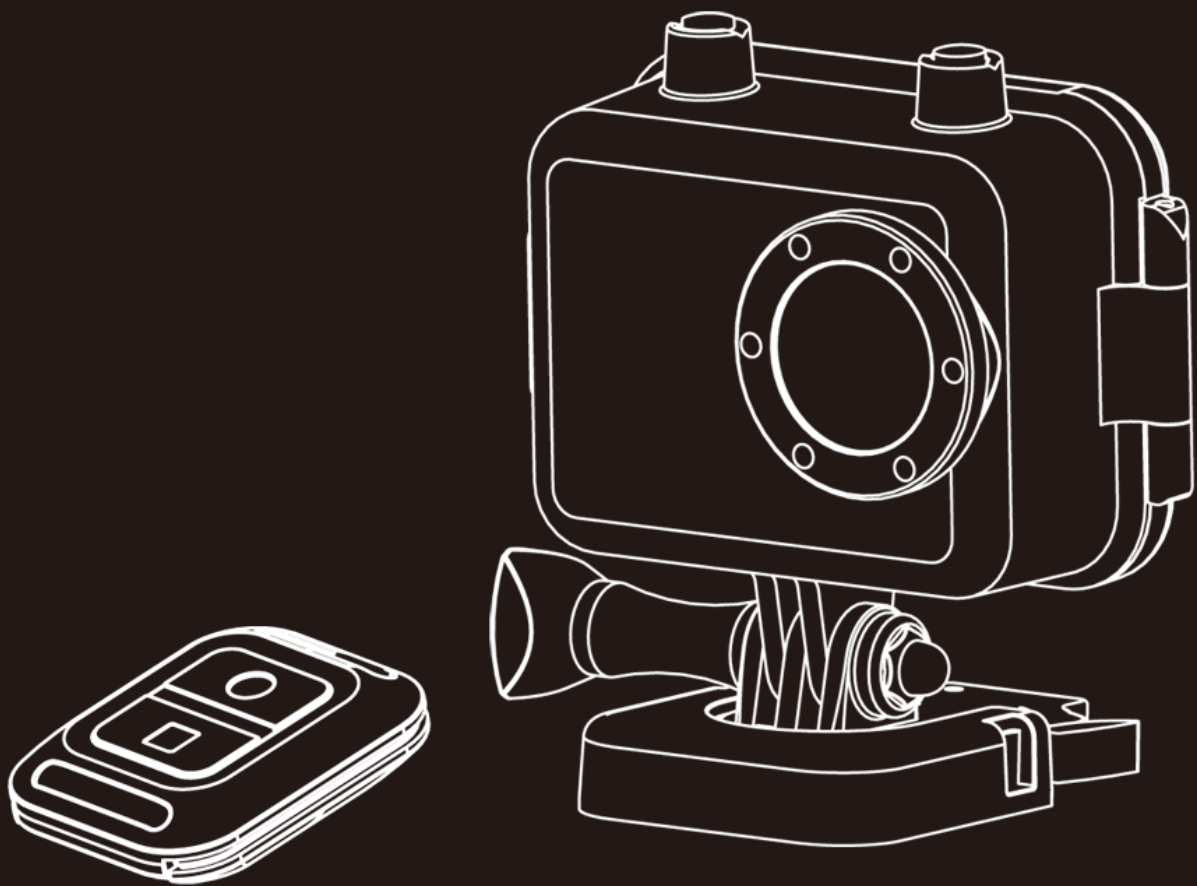




User Manual

Please read the user manual clearly for avoiding any wrong operation, current manual is not the newest and not complete, please contact us if any query.

Catalog

Main Feature	4
Install and Use	5
Camera body buttons	5
Remote controller	6
Install Battery	7
Close back cover	7
Install Memory Card	8
Install waterproof housing	9
Install the Mounts	10
Video record and Capture	11
Video Playback.....	12
Browse Pictures.....	13
Delete files	14
Connect to Television	15
Connect with Computer	16
Battery Power Charge	17
Charge by computer	17
Full charge time and Using time.....	18
Battery Icon instruction	18
System Menu	19
Bootimg picture & screen instuction.....	19
Icon on Screen.....	19
Main Menu	20
Record Setting	21
Record Mode	21
Loop Record	24
Video Resolution	25
Record Content.....	25
Time Stamp	26
Photo Size	26
Continuous Shot.....	26

Self-Timer	27
System Setting.....	28
Language Setting	28
Date & Time Setting	29
Image Flip	31
Light Frequency	31
Auto Power OFF.....	32
Auto Screen OFF.....	33
Volume.....	34
Format.....	34
Reset.....	35
Firmware Update	36
Version.....	37
Specifications	38

Main Feature

- 480 x 240 , 1.5" TFT LCD Screen
- 5.0MP FULL HD CMOS sensor
- 170° Super wide angle FOV(field of view) under 720P, 127 ° under 1080P 720P
- H.264 Compression into MP4 video format
- 50 Meters (167 Feet) Waterproof
- RF wireless remote controller
- Support Timing record, Motion detect record, Auto record and Loop record
- Support Timing Capture (Self-timer) , Continuous capture
- Zoom focus available under 720P video record and Picture capture mode
- Video resolution option in setting:

16 : 9 Full HD 1920 x 1080P 30FPS

4 : 3 Full HD 1440 x 1080P 30FPS

16 : 9 HD 1280 x 720P 60FPS

16 : 9 HD 1280 x 720P 30FPS

4 : 3 WVGA 848 x 480 60FPS

- Picture resolution option in setting:

4000 x 3000 12MP

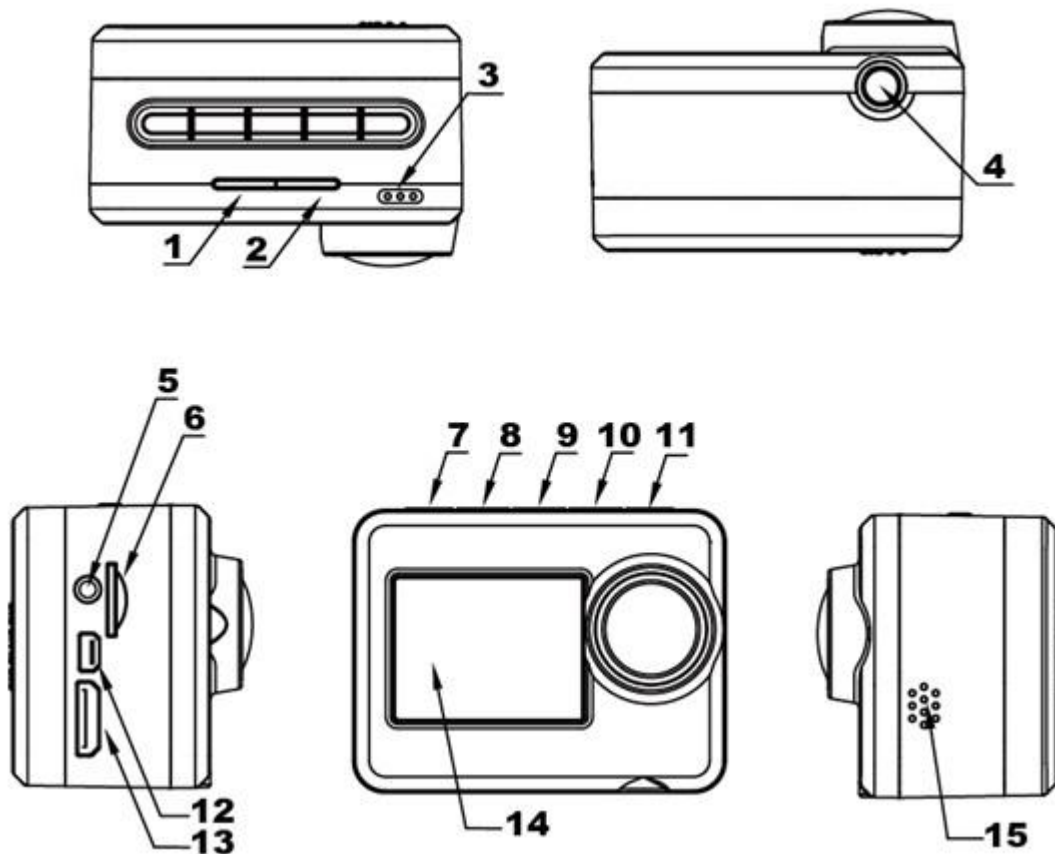
3200 x 2400 8MP

2592 x 1944 5MP

- Video & Picture playback
- Support 1GB~32GB High speed TF (Micro-SD) memory card
- High speed USB2.0 interface for Power charge and Data transfer
- HDMI、USB and RCA output optional

Install and Use

Camera body buttons



1. Power/REC (red) & Power charge Indicator (green)

2.Remote control indicator (Blue)

3.MIC

4.Tripod screw hole

5.MIC input

6.TF card slot

7.REC&Confirm button

8.UP & Zoom+

9.Menu button

10.Down & Zoom- / Remote Pair

11.Power ON & Picture Capture

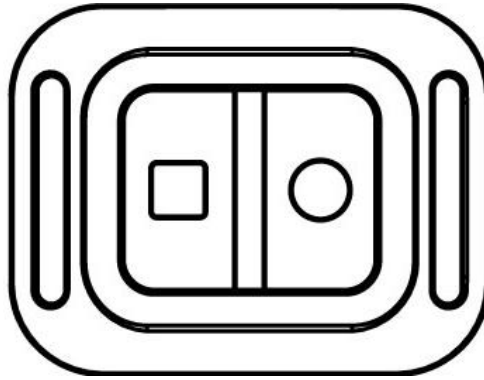
12.USB Port

13.HDMI Port

14. TFT LCD

15. Speaker

Remote controller



Start video record

Remote to start video record only under Camera Powered ON, not valid if camera is OFF.



Stop video record

Remote to Stop the video record.

Remote Pair with Camera

Power on the camera first, then Press & hold the MENU button and at the same time Press & hold the REC button on the remote controller (about 2 seconds), if the camera Blue and Green indicator turns ON and start to record automatically, means paired successfully.



Note:

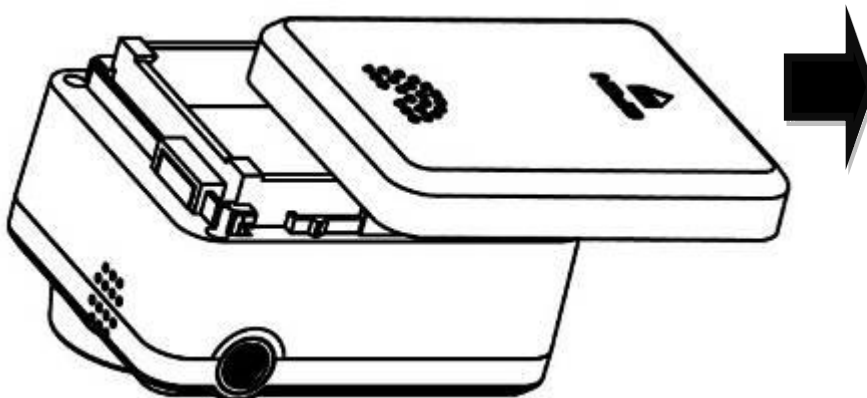
- Screen will keep dark during the pair process
- Camera will power ON automatically if paired successfully
- Camera will power OFF automatically if pairing failed

This operation only necessary when you bought new remote controller, pairing process has been did before leave factory.

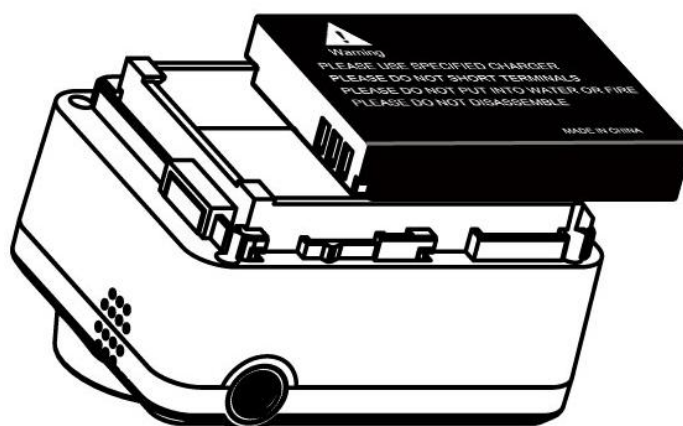
Install Battery

Please install the battery according to the graphic:

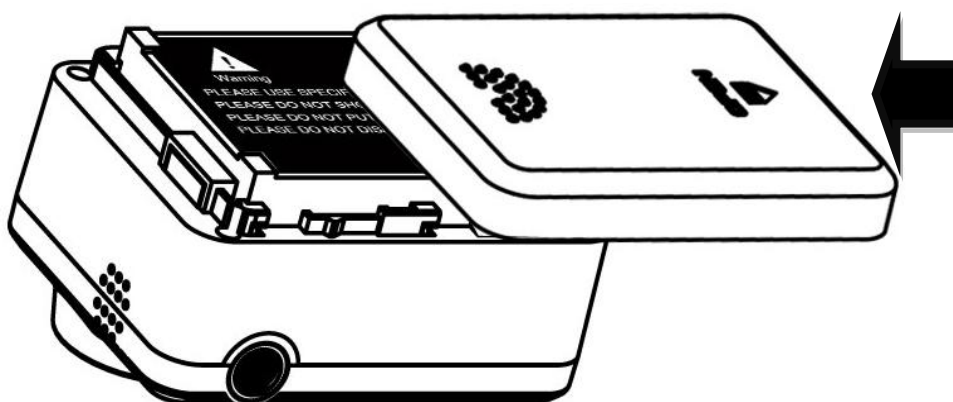
Open the battery cover



Install the battery (Note: label side face up)

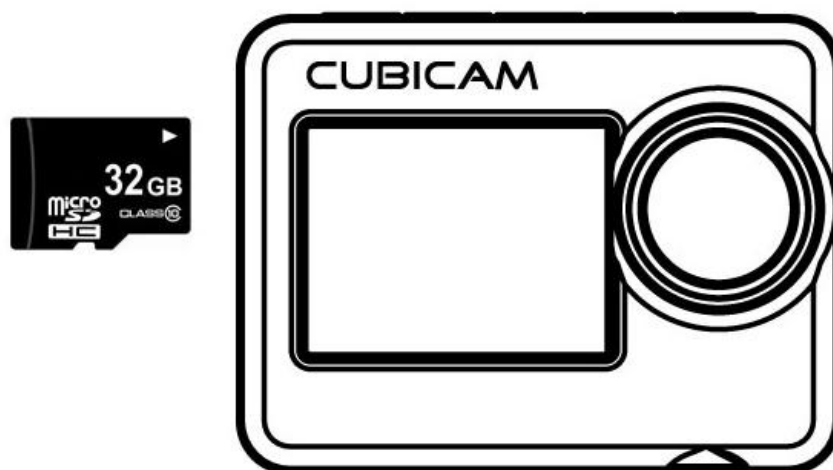


Close back cover



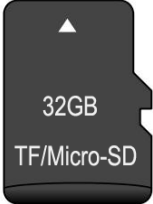
Install Memory Card

1.Install the TF card according to graphic



2.Camera without built-in memory, support 1GB~32GB TF card external memory expand

3. After installed the SD card, rest available memory could be checked on the screen

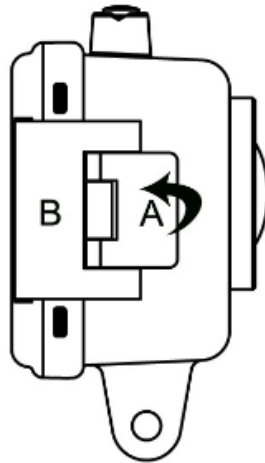
		Screen won't display the SD card icon if without valid SD card installed correctly
		Screen will display the SD card icon if valid SD card installed correctly

Attention:

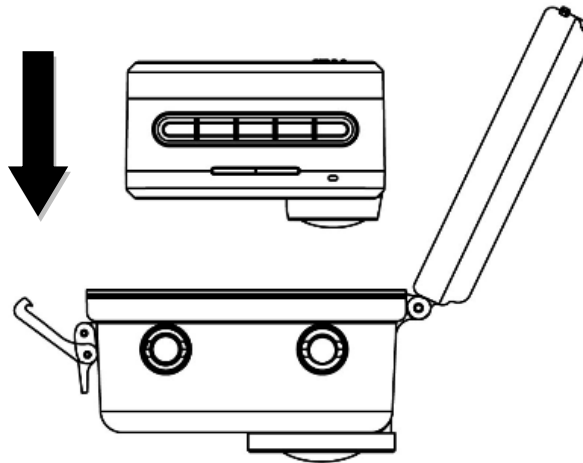
Please use the original SD card for good using experience. Bad or phony SD card would happen the problem like "can not read" or "file damaged". Please format the SD card in this camera before use it the first time.

Install waterproof housing

As arrowhead showed in graphic below, pull "A" locker, "B" locker will slack off at same time automatically

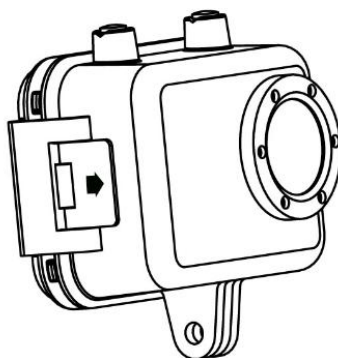


Put the camera into the waterproof housing as graphic below:

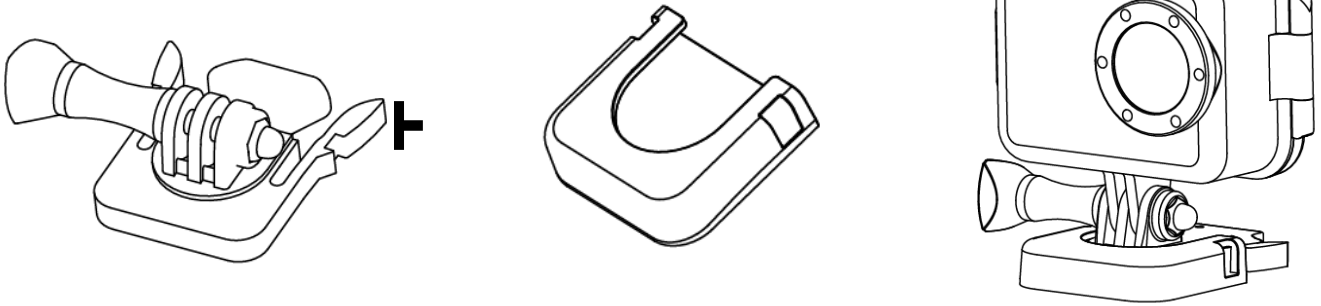


Close the cover

Close the locker "B" first, and then press the "A" locker to locked-in.

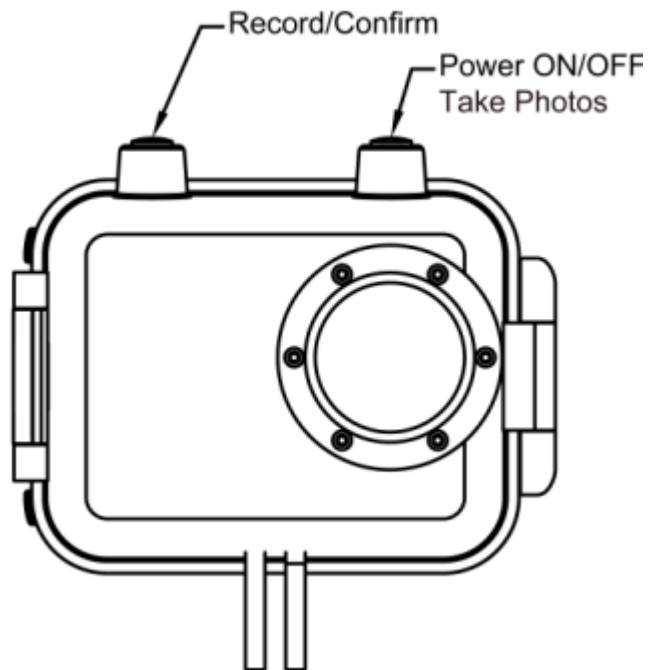


Install the Mounts



Please choose the suitable mount to finish the installation according to different use.

Waterproof Housing buttons instruction:



Note :

Waterproof housing max depth is 50 Meters (167 Feet)

A pot of fog or water globule would glue to the inside cover, it is allowed and won't effect the camera working.

Video record and Capture

1. Press **POWER** button 3 seconds to turn on the camera, press **REC** button to start the video record, a red icon will flash on the screen during this time.



Press "<" and ">" button to zoom, press **REC** again to stop the video record and video will be saved at the same time.

2. Under power on state, press **POWER** button to take picture, the camera icon on the screen flash into red color and go back to white color during this time. Press "<" and ">" to zoom.



The camera support Continuous capture and timing record, please read page 32 for more detailed setting and operation.

Video Playback

Press MENU button to enter the main menu of camera, use "<" and ">" to choose the video folder, the quantity of video clips will display on the corner.



Press **REC** button to enter the folder, video clip thumbnail will showed like below:



Press "<" and ">" to choose the video clip, press **REC** to confirm, press again to start video playing



Delete files - Please read page 14 for more details.

Browse Pictures

Press **MENU** button to enter the main menu, use "<" and ">" to choose the picture folder, picture quantity will display on the corner.



Press **REC** button to enter the picture folder, picture thumbnail will show like below:



Press "<" and ">" to select picture for browsing, press **REC** to confirm, use "<" and ">" to browse other pictures.



Delete files - Please read page 14 for more details.

Delete files

Long press **MENU** button under playing back or browsing state, delete option menu will display on the screen



Use "<" and ">" to make setting:

No : cancel current operation and quit

Yes : confirm current operation and quite

ALL : confirm delete all files in the folder

Press **REC** button to confirm operation

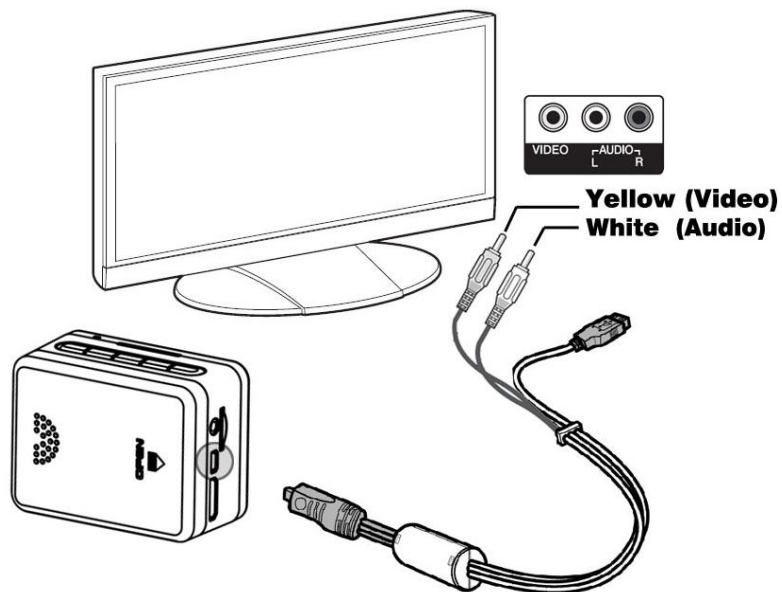
Attention :

The files will not be recover after deleted, recommend to make copy in the computer before make this operation.

Connect to Television

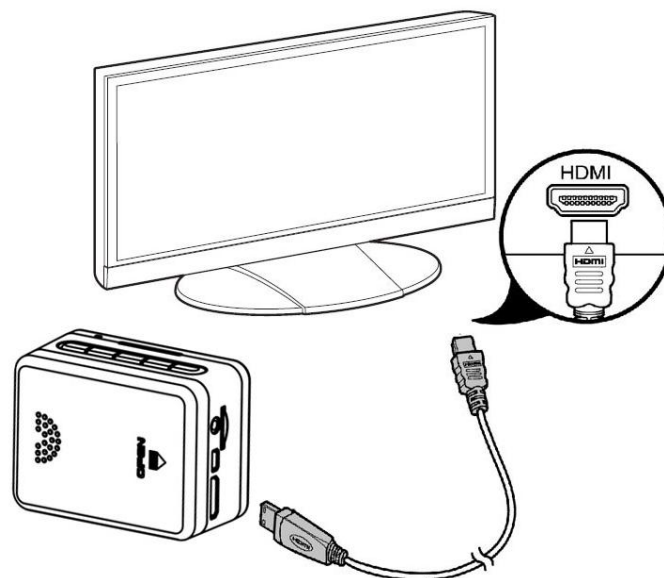
1.USB-RCA cable connect with TV (output)

Find out the USB-RCA cable in standard accessories, USB side insert to camera, RCA side insert to TV (Yellow for Video, White for Audio)



2. HDMI cable connect with TV (output)

Please insert the **A** type connector to the TV , insert **C** type connector to camera

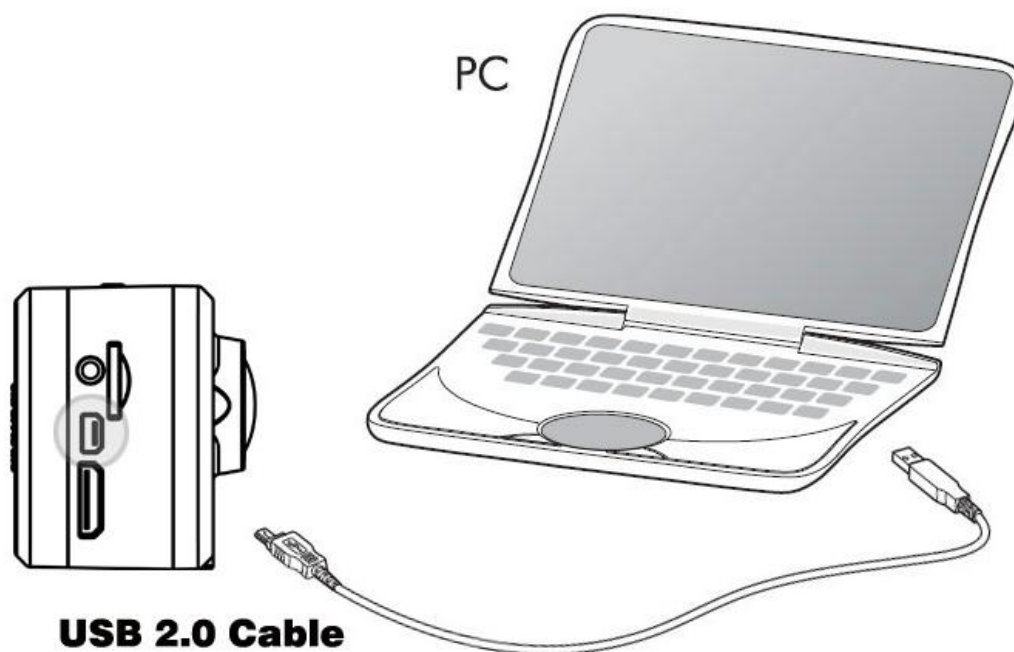


Note :

The video that output to TV is 1080P resolution when playing back video clip, real-time output display is 480i only.

Connect with Computer

Connect the camera with computer via USB cable, available for data transfer, power charge and firmware update.



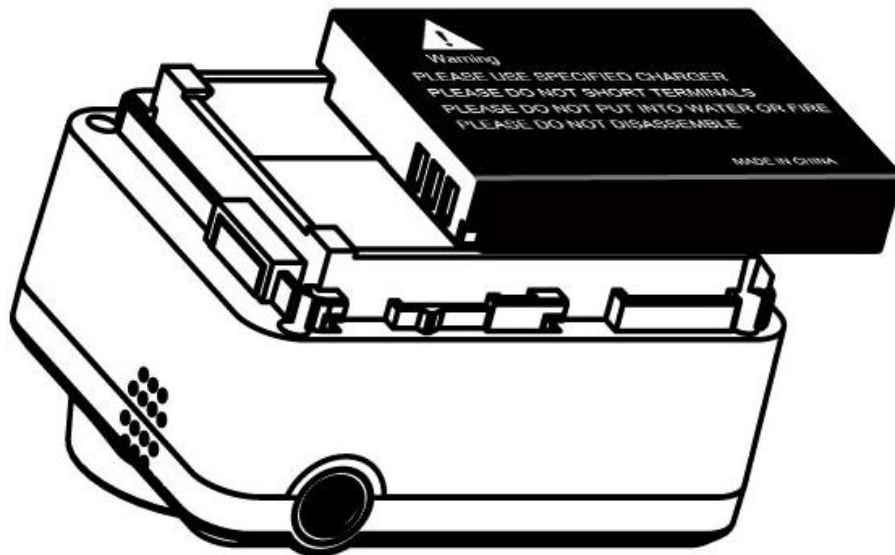
Power on the camera after connect it with the computer by USB cable, and the screen will display “ USB connected” like graphic below, means successfully connected.



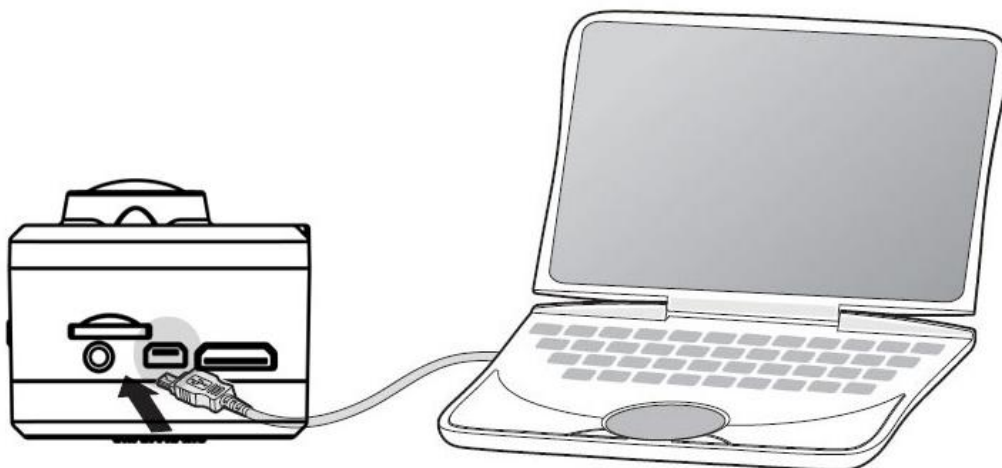
Removable disc will be found under “ **My Computer**” , enter the disc and it is available to browse 、 copy or playback the media.

Battery Power Charge

Install the battery (Note: label side face up)



Charge by computer



Note:

Power charge by computer, please make sure the camera is POWER OFF state. The green charging indicator will turn on, indicator will turn off after full charged.

Full charge time and Using time

Full charge time	Standby time	Video Record Time
3.5 Hours in Power ON state	Approximately: 3.5 Hours	Approximately : 110 Minutes (1080P)
2 Hours in Power OFF state		

Battery Icon instruction

	> 75% electric quantity		> 35% electric quantity
	> 10% electric quantity		< 10% electric quantity

ATTENTION:

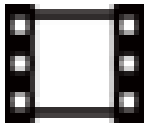
- a . Please uninstall the battery when camera is free
- b . Please do not exhaust the battery completely before power charge
- c . Full charge the battery in the first time will extend the battery life.

System Menu

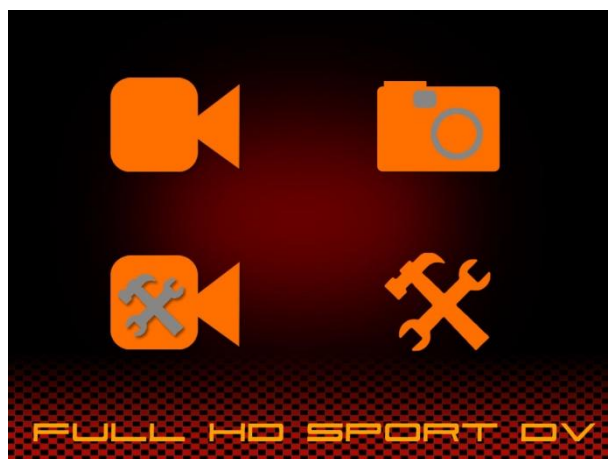
Booting picture & screen instuction



Icon on Screen

1920x1080	Video resolution		Video record
28000M	Available rest memory		Picture capture
15 : 33 : 24	Rest time of video record in memory		Continuous capture
2010/09/21	Year/Month/Date		Memory card
04 : 27 : 48	System time		Battery

Main Menu



Video folder



Picture folder

If here has video clip or picture in the folder, on the corner of icon will display the quantity number like graphic below:



Video setting

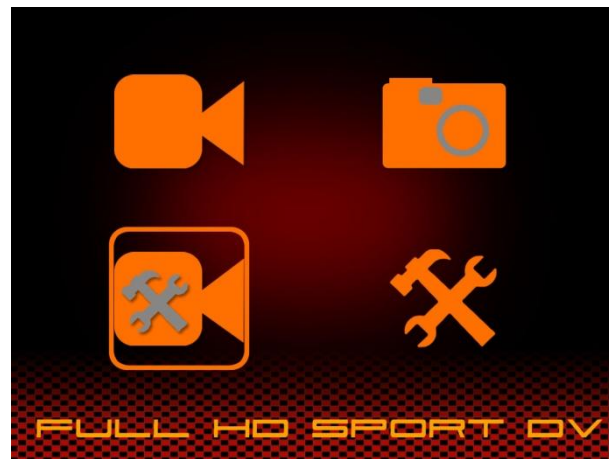


System setting

Record Setting

Record Mode

Press **MENU** button enter the main menu, and select the Record setting menu as below, press **REC** button to enter.



Video record setting menu will display as below:



- a. **Normal REC** : Means the camera will start the video record after press the **REC** button normally under real-time preview state, press **REC** button again to stop video record and save the video clip.



- b. **Motion detect:** Means the camera will start the video record only when the lens detected movement, camera will not stop video record until here without movement in the picture.

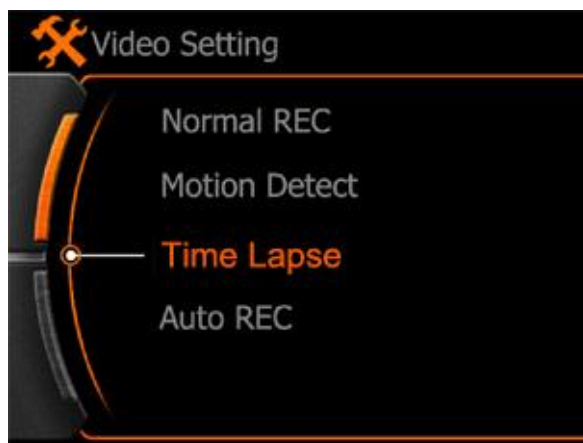


Note :

The movement detect will start after 10 second only when first time setting did.

First time default video record time is 1 minute, if here also have movement after recorded 30 seconds, system will continue record another 30 seconds, camera will not stop video record if movement always happen in the picture except battery empty or memory full.

- c. **Time REC:** Set a time (local time) to start the video record automatically



Choose the **REC mode** first, and then go to set the time under another menu “**Time Lapse Setting**”.

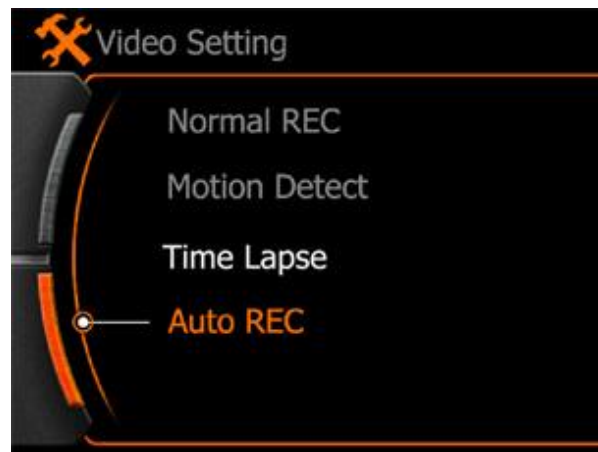
The “**Time Lapse setting**” only available when the REC mode under “**Time Lapse**”.

Frame/1 sec. For example, we will get a 48 Minutes Footage after 24 Hours video record

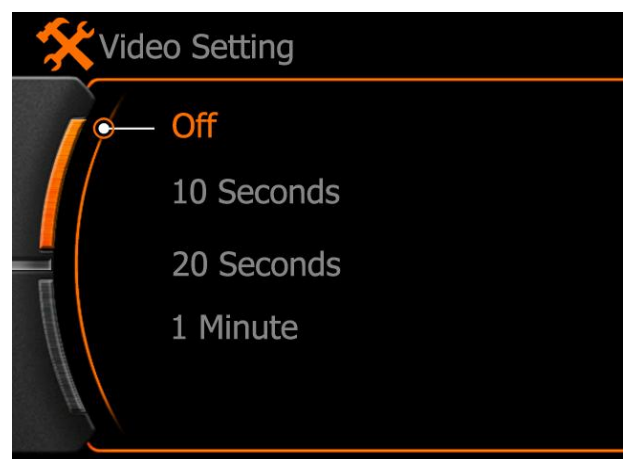
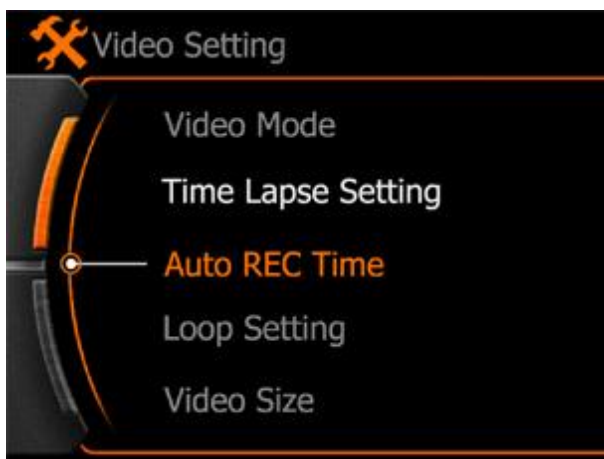
Frame/10 sec. For example, we will get a 288 Seconds Footage after 24 Hours video record

Frame /30 sec For example, we will get a 96 Seconds Footage after 24 Hours video record.

d. Auto REC: Camera will start video record automatically after power ON.



After the “ Auto REC” option selected, then still need to set a time under “ Auto REC time” as below:



OFF : Not activated

10 Seconds : Camera will start video record in 10 Seconds after power ON (start the vehicle).

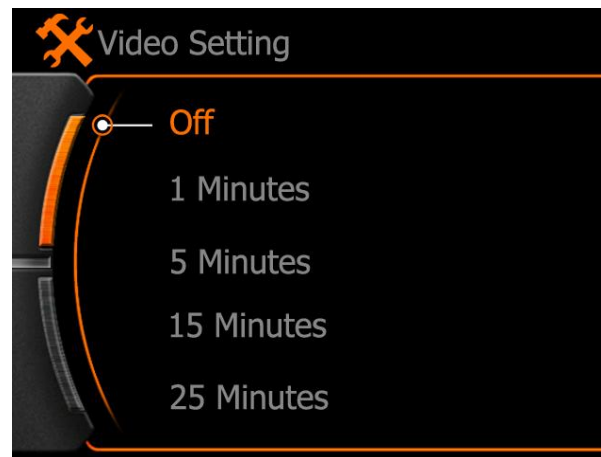
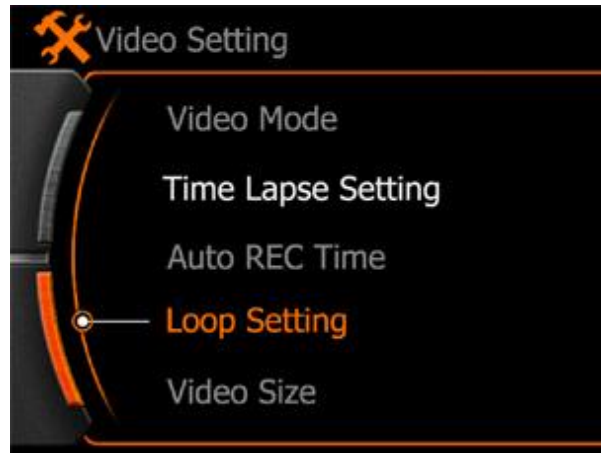
20 Seconds : Camera will start video record in 20 Seconds after power ON (start the vehicle).

1 Minute : Camera will start video record in 60 Seconds after power ON (start the vehicle).

Note : "Auto REC" function should work with the "Auto REC time" setting, this function is designed for car black box that used with cigar lighter charger in vehicle. Cigar lighter charger is custom made and special for this camera, other charger will not make this camera works. Cigar lighter charger is optional accessory.

Loop Record

The camera will delete the earliest video clip for newest video clip if memory is not enough.



Select the “ Loop Setting” and press “ REC” button to enter the time setting.

OFF : Loop record is not activated

1 Minute: 1 minute per video clip.

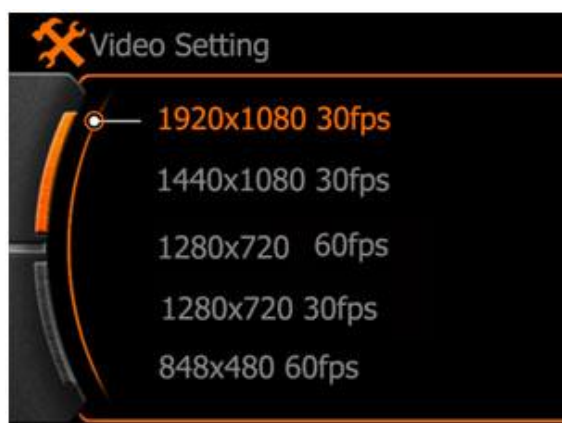
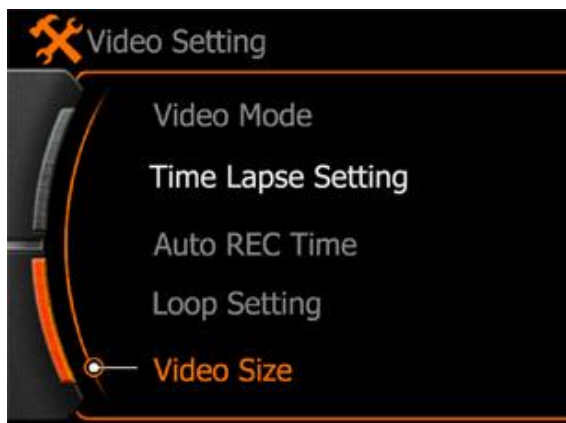
5 Minutes: 5 minutes per video clip.

Note:

Loop record only available under Normal record and Auto REC mode.

Video Resolution

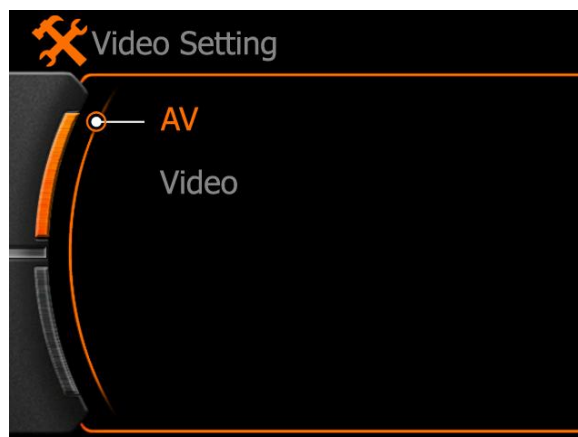
Choose suitable resolution for different purpose, lower resolution will save power and memory for longer time record.



Resolution		Frame Rate	Ratio
1920x1080	Full HD 1080P	30FPS	16 : 9
1440x1080	Full HD1080P	30FPS	4 : 3
1280x720	HD 720P	60FPS	16 : 9
1280x720	HD 720P	30FPS	16 : 9
848x480	QVGA	60FPS	4 : 3

Record Content

A setting option for “ Audio and Video ” (video clip with sound) or “ Video ” (video clip without sound) only.



Press **REC** button to confirm setting and quit.

Time Stamp

Date and Time will display on the video clip if “ Enable” this feature.

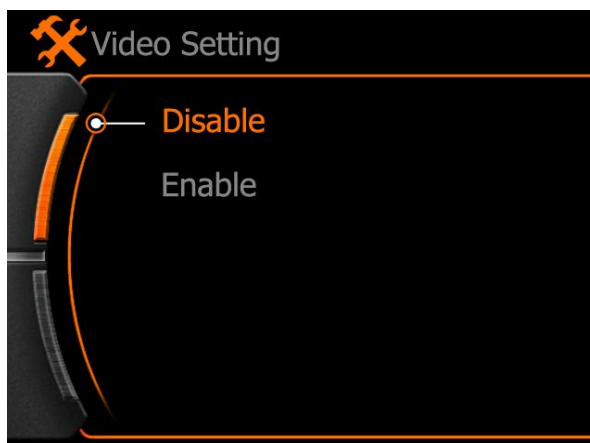
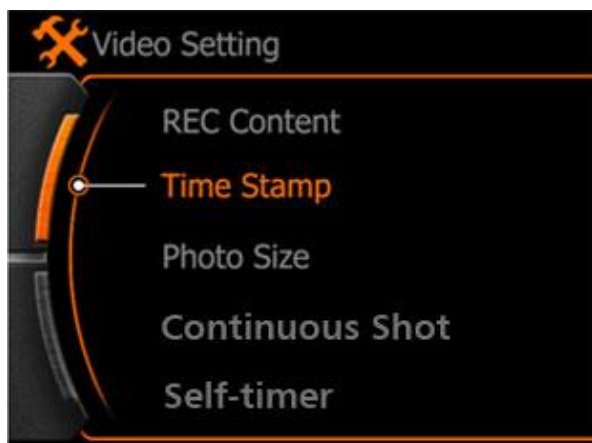
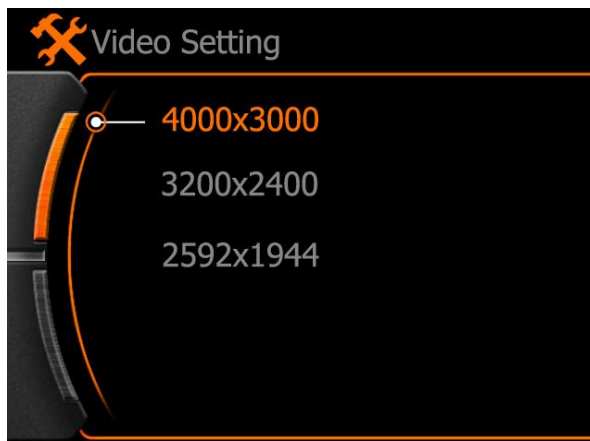
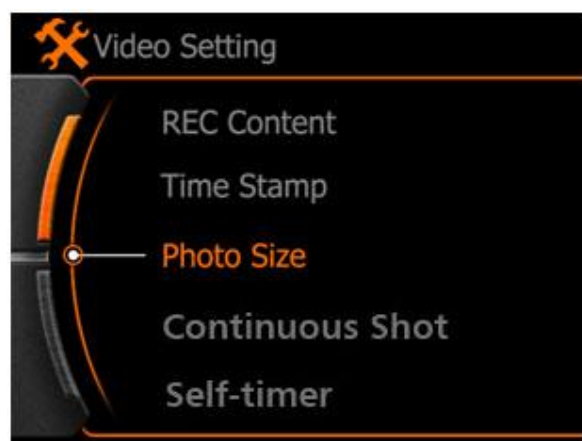


Photo Size

A setting option of the picture resolution when take a picture.



Continuous Shot

Press MENU to enter the main menu, use < > button to select “ Continuous shot” menu, press REC to confirm and choose the quantity of one shot.



Self-Timer

Press POWER button to active this feature, camera will take pictures in every 10 seconds if no other operation during this.



Note :

If will not available for the Continuous Shot and Self-Time feature after power OFF, will turn to normal capture automatically.

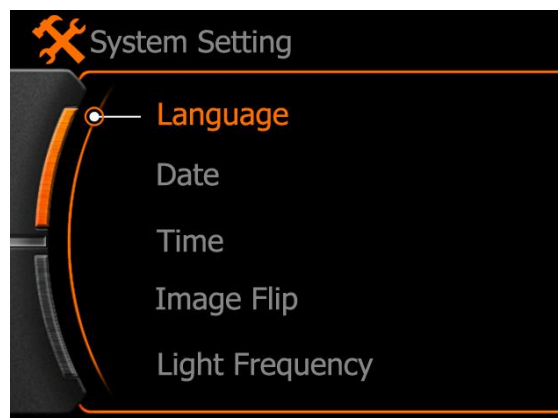
System Setting

Press **MENU** to enter the main menu, System setting icon showed as below, select and press **REC** button to enter.



Language Setting

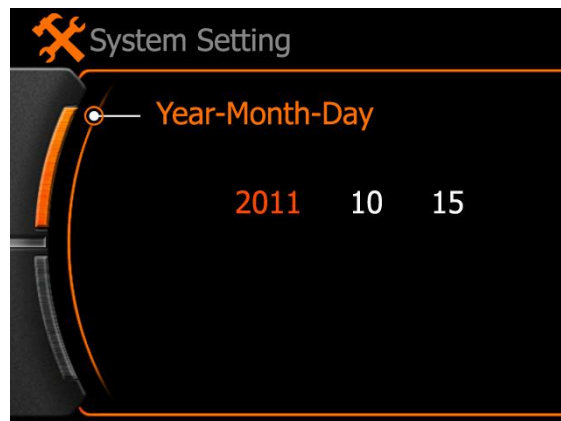
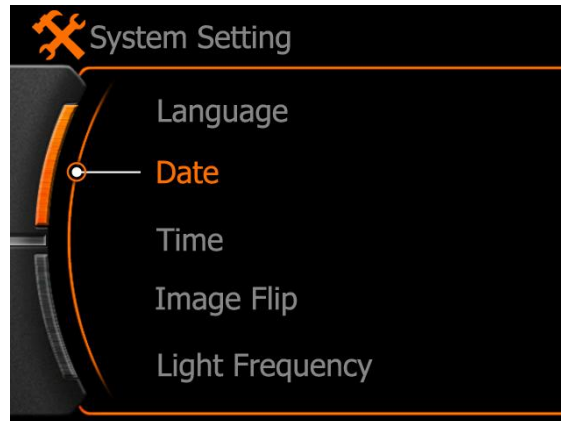
Select the language and press **REC** button to confirm.



Date & Time Setting

1.Date Setting:

Enter date setting, press **REC** to select the option, and press **REC** again to next option



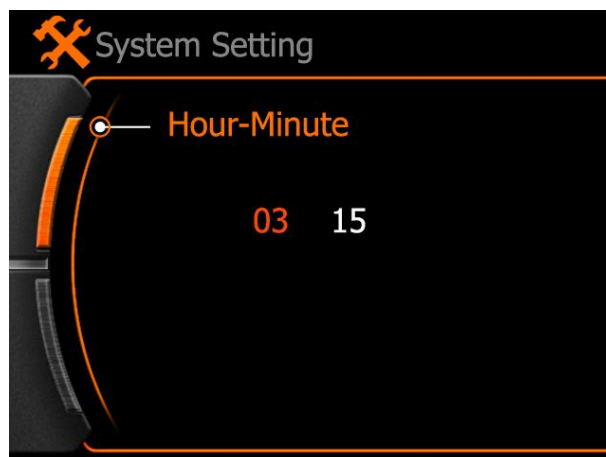
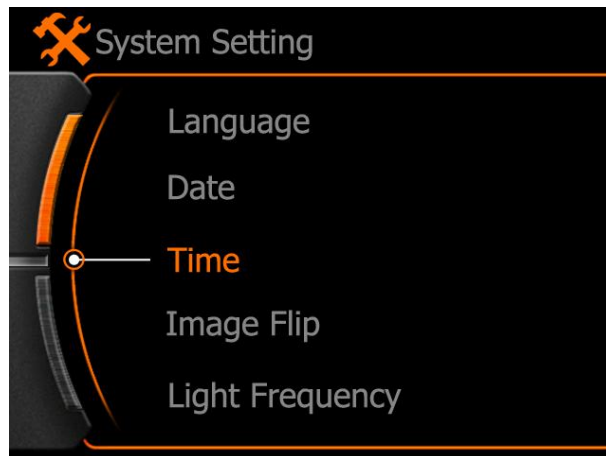
2011 10 15

2011 : Year option, Red color means changeable

10 : Month option, press REC to select and use "<" or ">" to change

15 : Date option, press REC to select and use "<" or ">" to change

2. Time Setting



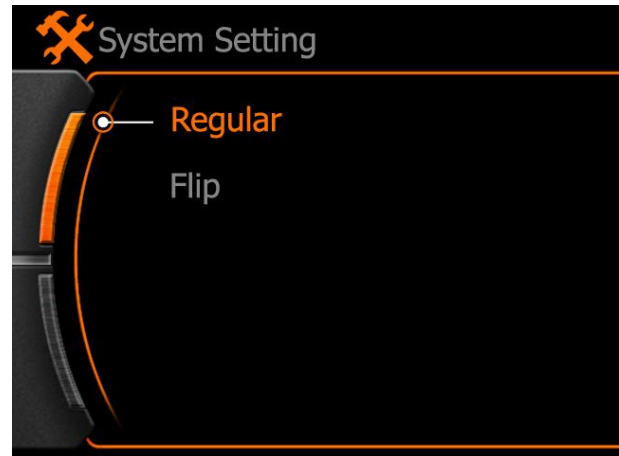
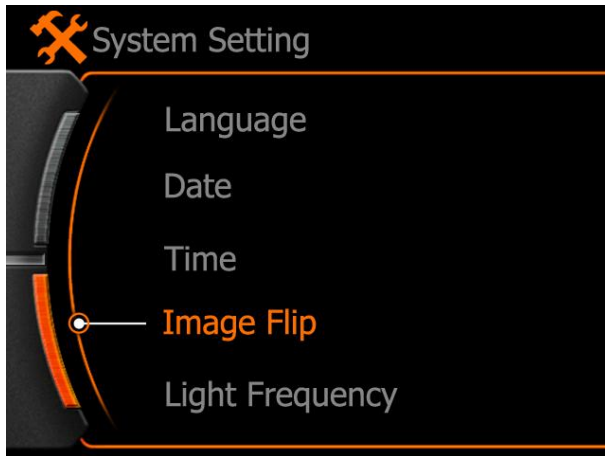
03 15

03: Hour 15: Minute

Same operation as date setting.

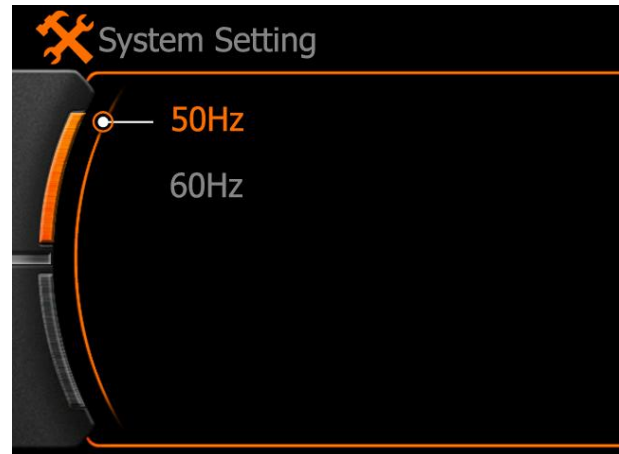
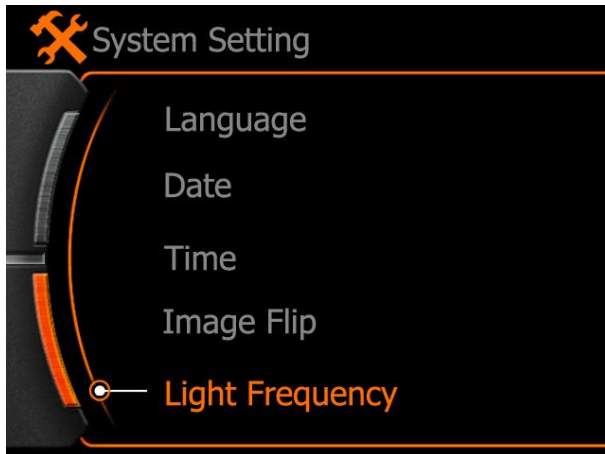
Image Flip

Active this function when you need to install the camera at upside down position, to make right video recorded. The recorded image will flip 180° .



Light Frequency

Please choose the correct frequency according to your country or area, picture would flash if incorrect frequency set.



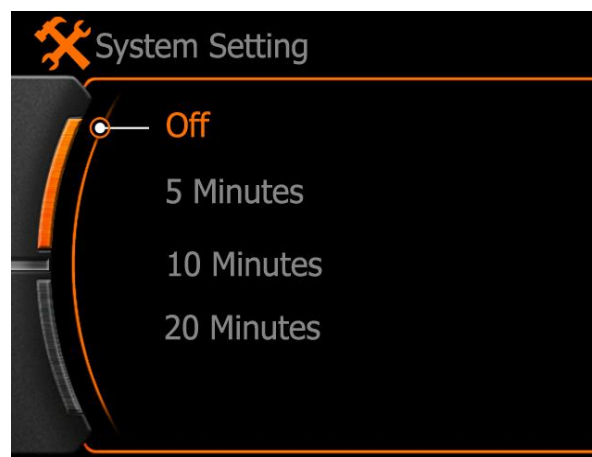
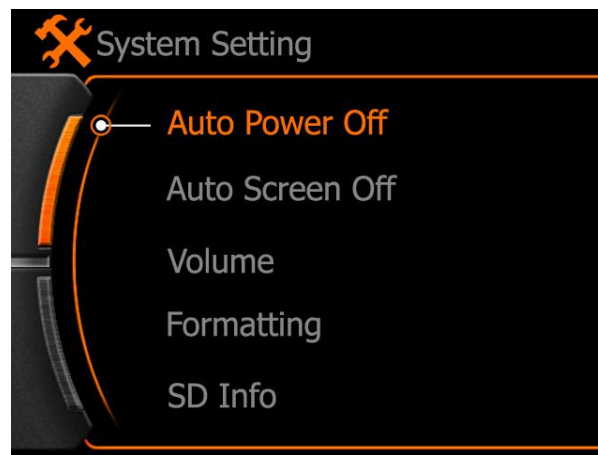
CHINA: 50Hz

USA: 50Hz

EU: 60Hz

Auto Power OFF

If you want the camera power off automatically after some time, then active this function and set a time.



Press **REC** button to enter and confirm setting.

OFF : Not actived

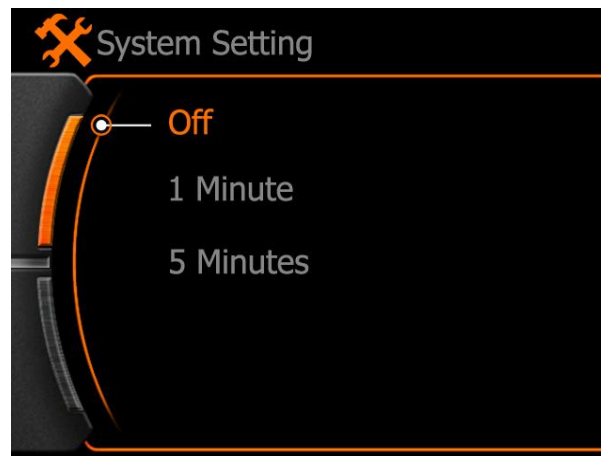
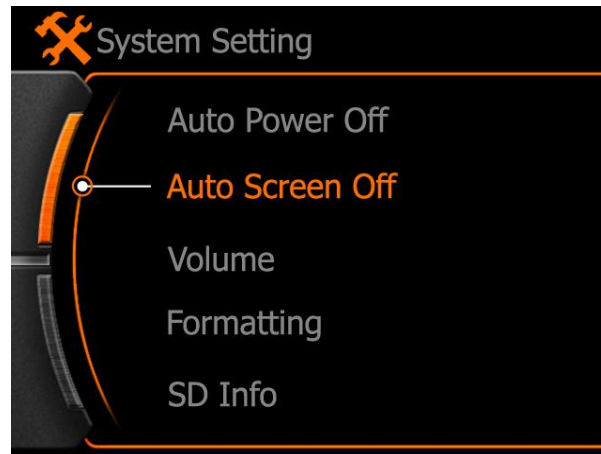
5 Mins : Camera will power OFF after 5 minutes whatever state

10 Mins : Camera will power OFF after 10 minutes whatever state

20 Mins : Camera will power OFF after 20 minutes whatever state

Auto Screen OFF

For power saving or other purpose, we would need to turn off the screen.



Press **REC** button to enter and confirm the setting.

OFF : Not actived

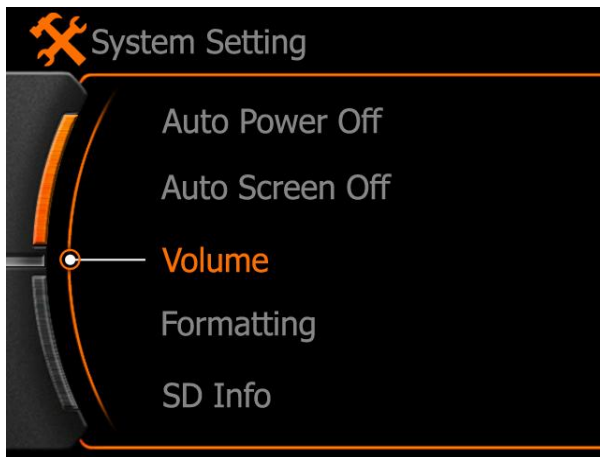
1Minute : Camera will turn off the screen automatically whatever state

5Minutes : Camera will turn off the screen automatically whatever state

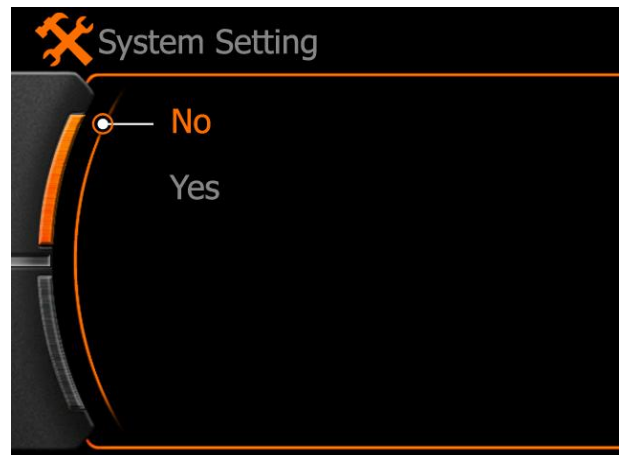
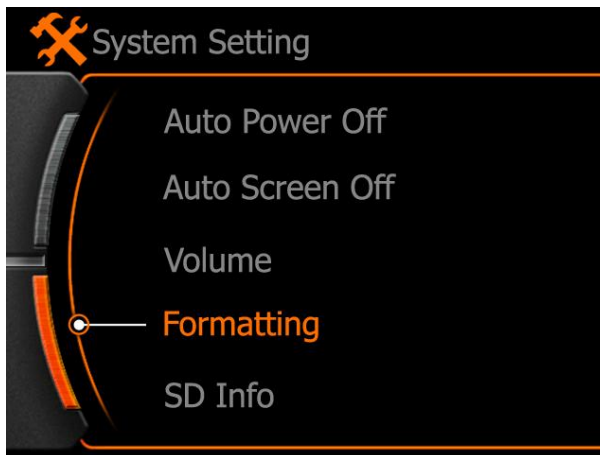
Recommend to turn on this function for longer time working.

Volume

Volume option for Button press and speaker.



Format

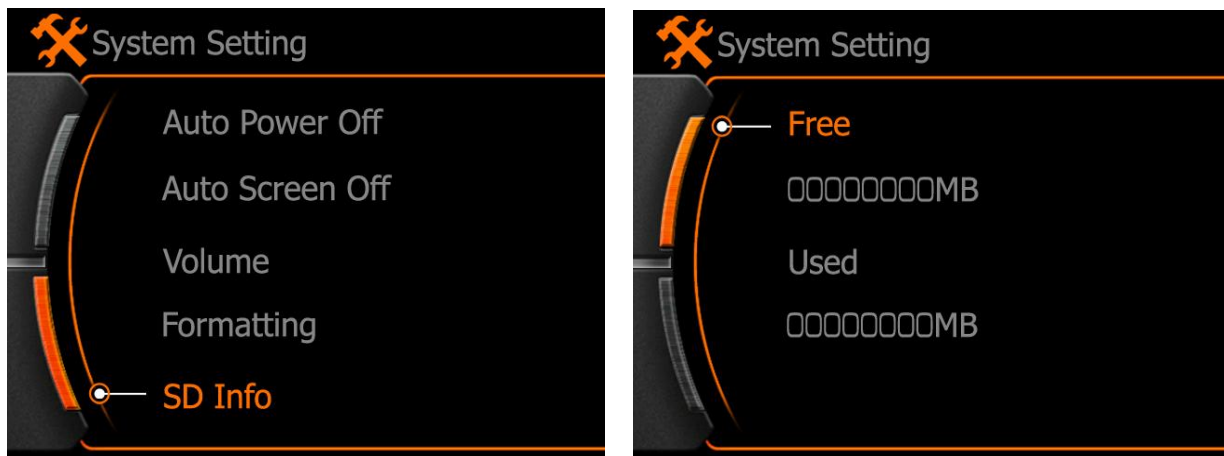


Note :

Date can not recover after formatted, please make copy before this operation.

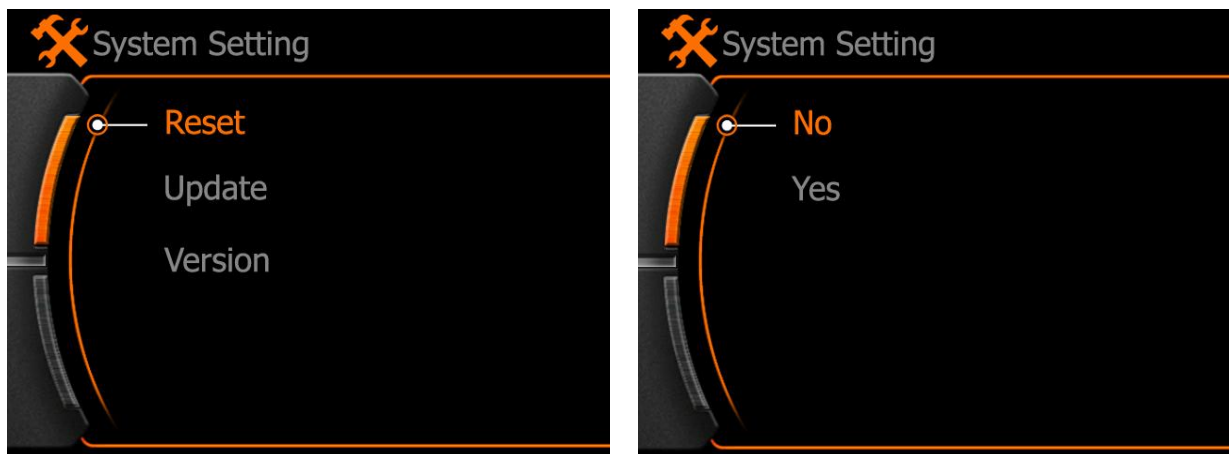
Memory Info

To show the used memory and rest available memory of SD card.



Reset

The system will reset to the factory-set if do this operation.



Note :

If the user updated the firmware, would need to reset the system once to make the software work normally.

Firmware Update

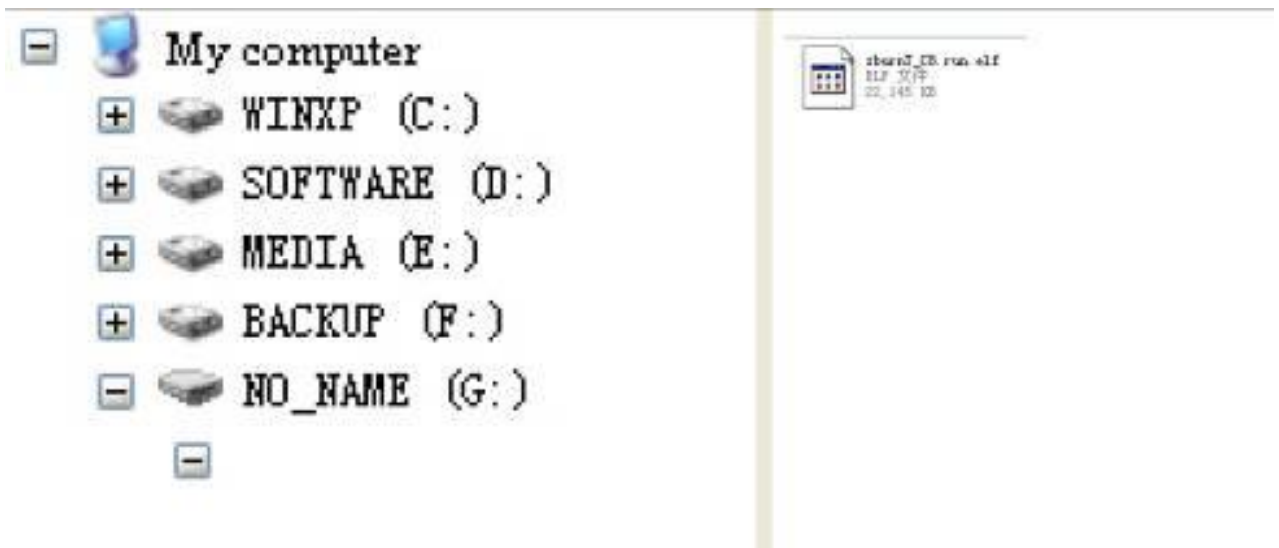
Download the firmware package from official website or local distributors website, the package as below:



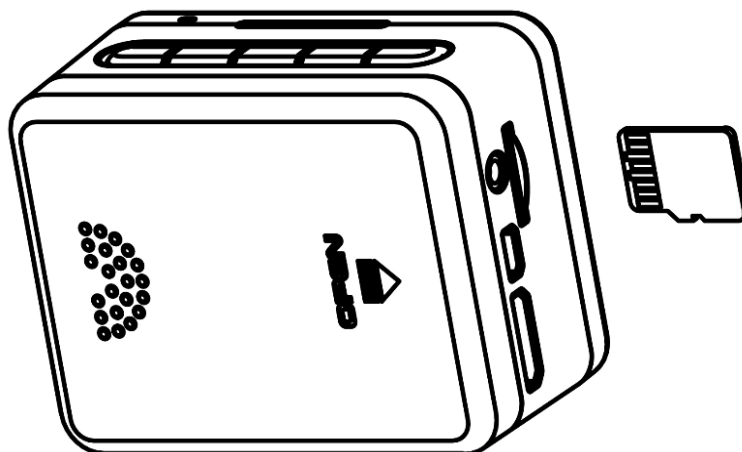
After released:



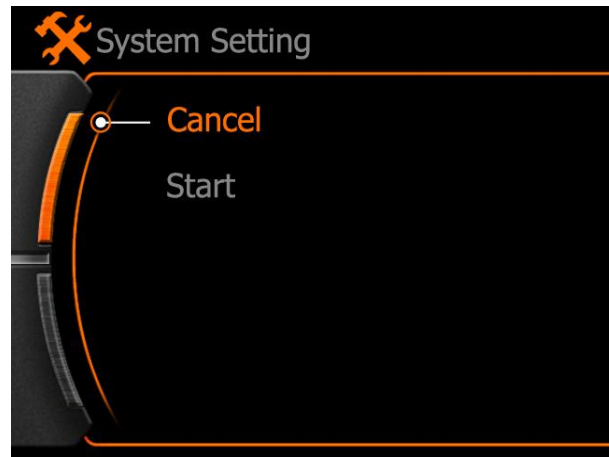
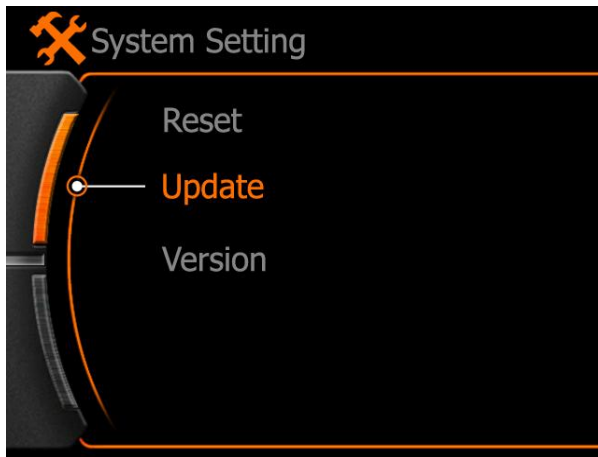
Copy the firmware “**EGOHD1080P-V1.00.bin**” to the root directory of SD card (Do not modify the file name)



Install the SD card



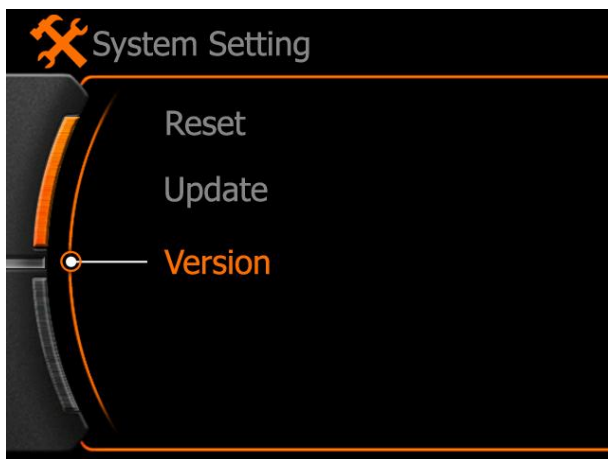
Firmware Update



Select “ Start” and press REC button to confirm the update operation, camera will reboot automatically after finished, if here without correct firmware in the SD card, system will notice on screen.

Version

To check the version of current running software. (Model No. – Version)



Specifications

	Item		Spec	Remark
Basic Spec	Built in memory		32MB	
	TF Card		1-32GB	Support SDHC
	LCD	size	1.5 inch	
		resolution	480x240	
	sensor	size	1/2.5 inch	CMOS
		Image pixel	2592H x 1944V	
	video	Output interface	HDMI/USB/RCA	
	audio	MIC	Built in	
		Output interface	HDMI/USB/RCA	
		speaker	Built in	
	PC interface	USB	USB 2.0	High speed
	Power	Battery	3.7[V], 800[mAh]	Li-ion battery
		DC charger	DC 4.2V, 0.7A	(Optional)
Main unit spec	Main unit dimension		58.6x31.2x44.8mm	
	weight		g	With battery
	Waterproof housing dimension		84x45x59mm	
Other function	Motion detection		YES	
	Timing record		YES	
	Auto record		YES	
	Loop record		YES	
	Continuous capture		YES	
	Self-timer		YES	
	Zoom focus		YES	
	Time stamp		YES	

	Item		Spec	Remark
	Image flip		YES	180° upright
	Video quality option		YES	
	Support record under screen off		YES	
	File protection while low power		YES	
Record spec	Auto power OFF option		YES	5、10、20 minutes
	Video record	Optional	FULL HD1920x1080 30FPS	
			FULL HD 1440x1080 30FPS	
			FULL HD1280x720 60FPS	
			FULL HD1280x720 30FPS	
			QVGA 848x480 60FPS	
	Capture	Optional	4000 x 3000 12MP	
			3200 x 2400 8MP	
			2592 x 1944 5MP	
	Sound record		No	
Play back	Slide playback		No	
	Thumbnail browse		YES	2 x 3 Martix
	Video	Support	Full HD 1920x1080 Full HD1440x1080 HD 1280x720	HD 1280x720 WVGA: 848x480
		Frame rates	30 FPS	60 FPS
		File format	FULL HD MP4 H.264/MPEG4	
		Playing speed	Optional	X1, X2,X 4,X 8



Please login www.jeasun.net for more product information.